

THE URGENT NEED TO RECOGNIZE AND PROMOTE THE NATION'S VOCATIONAL-TECHNICAL EDUCATION SYSTEM

A REPORT TO THE AMERICAN PEOPLE



NATIONAL COUNCIL ON VOCATIONAL EDUCATION 1989

AMERICA'S

HIDDEN

TREASURE

THE URGENT NEED TO RECOGNIZE AND PROMOTE THE NATION'S VOCATIONAL-TECHNICAL EDUCATION SYSTEM

A REPORT TO THE AMERICAN PEOPLE

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AN OPEN LETTER TO THE AMERICAN PEOPLE

Dear Fellow Citizens:

The greatest resource in our Nation is our people – the men and women who produce the goods and deliver the services that keep our economy running and provide so many benefits to the world. Today, our country competes head-on with other leading industrial nations. We must ensure that members of our workforce are well educated and well trained for the demanding requirements of today's technology-driven economy.

We have in America a wonderful treasure – the vocational-technical education system. Unfortunately, it is a hidden treasure. Too few people know about or appreciate the value of this system. Too few educators, government officials, and even parents of school-age young people understand the high promise of a career that begins in vocational-technical school. The overwhelming majority of the best new jobs in America today are being filled by men and women educated in vocational-technical schools.

This report to the American people is intended to alert the public to the tremendous untapped potential of the vocational-educational system. Please think about the vocational-technical school in your own community, and see how it can help people to find excellent careers for themselves, even as it helps our Nation to maintain our position in the world economy.

Michael R. Farley

Chairman

National Council on Vocational Education

Michael R. Twiley

A note on the National Council on Vocational Education

The 17 members of the National Council on Vocational Education are appointed by the President to carry out the mandate of the Council. Congress established the Council under the Carl D. Perkins Vocational Education Act of 1984 to advise the President, Congress, and the Secretary of Education on a wide range of issues pertaining to vocational-technical education. Further information on the Council and the Perkins Act appears at the end of this booklet.

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Everybody in this country benefits from vocational-technical education, but most people know next to nothing about it, what it does, or how it works. Some people -- including some government leaders and even educators -- seem to care little about this wonderful and powerful resource that this Nation has. The National Council on Vocational Education calls vocational-technical education America's hidden treasure, because it's as good as the gold in Fort Knox -- and just about as far from public view.

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Vocational-technical education is an important national treasure because:

Eighteen of the 20 fastest growing occupations within the next decade require vocational-technical education.

- Eighteen of the 20 fastest growing occupations within the next decade require vocational-technical education (the other 2 require a bachelor's degree).
- Vocational-technical education prepares students for 26 of the 37 occupations that the Bureau of Labor Statistics predicts will account for the largest number of new jobs by 1995.

All of these facts add up to a picture of vocational-technical education that differs dramatically from the stereotype of wood shop and auto mechanics. The American vocational-technical education system now in place can help to solve many of the social and economic problems of the Nation.

Spread across this Nation are some 26,000 institutions that teach vocational-technical education to more than 16 million students at any one time. They are learning skills that are critically important to the economic future of this country, important to every man, woman, and child in this country. These students are studying to become the high-tech computer programmers and operators, equipment assemblers, and communications specialists who will help lead this Nation into the 21st century.

Some people may still view vocational-technical education as something taught in a dingy print shop or metal shop or auto mechanics shop. That old stereotype -- vocational-technical education as dull and boring and leading to a dull and boring life -- just does not hold water any more, if it ever did.

Vocational-technical education today is as sparkling new and bright as the surface of a NASA rocket, which as a matter of fact was probably fabricated, assembled, and prepared for liftoff by graduates of vocational-technical education. In fact, on the NASA Space Shuttle program, there were five technicians employed for every engineer. Vocational-technical education offers a course of study that leads to exciting and financially profitable work. It opens wide the door of opportunity for millions of young people, displaced workers, and the handicapped to build rewarding and fulfilling lives for themselves and their families.

The value of this hidden asset can be seen daily in classified ads in the newspapers of the Nation. The ads call for applicants who are electricians, floral designers, glaziers (the workers who replace broken windows), legal secretaries, medical X-ray technicians, and printing press operators, to name just a few. This evidence shows that anyone who has a skill can find a job and will be employed if that skill matches the needs of today's economy. The jobs for people are higher skilled and better paying jobs; the lower skilled jobs can, in an increasing number of cases, be done by machine.

Typical classified ads also tell the story of modern-day vocational-technical education graduates at work:

- A wide variety of occupations -- many choices for the individual.
- Available jobs -- these people are in demand.
- Good pay and benefits, including profit-sharing and bonuses -- employers want these people.
- High skill requirements, including command of traditional academic subjects such as grammar -- these people are well educated.

The time has come for policymakers, decisionmakers, and educators to take a strong second look at vocational-technical education. A lot has happened since they may have last looked at this valuable national resource. Government leaders at all levels should also ensure that quality vocational-technical education programs are available to all students who want them. Although

All new jobs by the year 2000

Jobs that will require more than a high school education

> Jobs to be filled by college graduates

these programs are effective and up-to-date in many places, some can be improved; Federal, State, and local government leaders should work to ensure that all such programs are of the highest possible quality.

The time has come, too, for parents and students themselves to take a strong second look at the benefits of vocational-technical education. The U.S. economy is headed down a track that will require millions of trained workers in the coming years. Business and industry are way ahead — they know the value of vocational-technical education and support it enthusiastically.

As the want ads show, employers are eager to attract skilled workers and are willing to offer the security, pay, and benefits to recruit and retain those workers. Vocational-technical education is worth looking at. It's the wave of the future.

Vocational-Technical Education Has Important Consequences

Vocationaltechnical education graduates more than 2 million skilled workers each year. The effect of vocational-technical education in this society is broad and deep. This educational system is helping the Nation to meet foreign competition through producing high-quality technically skilled workers (see below). It is helping to reduce the rate of illiteracy: 27 million adults in this country cannot read. And it helps to raise the general educational level of the population, which is important as the 21st century approaches.

Consider these facts about the Nation's vocational-technical education system:

- It graduates more than 2 million skilled workers each year.
- It provides 23 million adults with more than 43 million classes a year.
- Of all high school seniors who graduated in 1982, 97 percent took at least one vocational-technical education course.
- Forty-five percent of all vocational credits earned are earned by the top academic students.

Consider that students in this system increasingly go on to postsecondary education to acquire the high levels of skills needed in today's economy:

■ 60 percent of all high school vocational graduates enter some form of postsecondary education.

Consider that the employment marketplace is attuned to the graduates of the vocational-technical education system:

- Most jobs require education beyond high school but do not require a bachelor's degree.
- Of the 1980 high school graduates who immediately entered 4-year colleges, fewer than one-sixth attained a bachelor's degree.

Vocational-Technical Education Helps America in International Competition

The United States faces stiff international economic competition. Foreign countries now manufacture major portions of industrial and consumer goods once manufactured in this country. In the case of some finished goods, including certain television products, the United States does not manufacture the product at all, but imports it from abroad. Foreign nations now challenge American business across a broad spectrum of economic activity -- and in some cases the foreign competitors are winning.

The answer to this competition is not trade barriers. Free trade benefits both the United States and its foreign allies. Rather, the answer lies in improving America's capacity to meet foreign competition on its own terms -- in the efficient manufacture of high-quality goods.

Compared with other countries, the U.S. workforce competes well with white-collar and technical managerial counterparts in other nations. American schools turn out the highly skilled scientists, engineers, business managers, and financial experts who are vital to business success. In the production plant, however, American workers who are well prepared to compete with their foreign counterparts are in short supply.

60 percent of all high school vocational graduates enter some form of post-secondary education.

The lesson is clear: government policymakers and educators must stop concentrating on preparing the technical and managerial elite. They must enlarge their vision to include the critical segment of the workforce who will handle the production phase of the competitive cycle. It is on these men and women that responsibility falls to maintain efficiency and quality in producing the goods and services that can compete effectively in the international marketplace. These workers will gain their skills in the Nation's vocational-technical education system.

Vocational-Technical Education Trains At-Risk Populations

An important and often overlooked contribution of the vocational-technical education system is the training of at-risk populations to become economically self-sufficient. This training enables people who might otherwise be deprived of the opportunity to work with satisfying and dignified ways to earn their own way. Consider these facts:

Most jobs require education beyond high school but do not require a bachelor's degree.

- Vocational-technical education serves 3 million secondary and postsecondary disadvantaged and handicapped students each year.
- Eighty-two percent of the students served through disadvantaged and handicapped programs enter employment or continue their education on completion of their program.

A study in New York City conducted by the New York City Board of Education, Office of Education Assessment, found that the dropout rate for occupational (vocational-technical education) students was 4.7 percent, while the non-occupational education student dropout rate was 13.5 percent, nearly three times as high. The Council believes, as do those who conducted the study, that the rate is lower because the occupational education students have made a choice and have a purpose for their education.

Vocational-Technical Education Gives Employers the Skilled Workers They Want

Correcting the mismatch between the labor pool and the future marketplace for employment requires measuring the needs of employers. What kinds of employees do American employers want?

In a recent report by the American Society for Training and Development and the U.S. Department of Labor, the answer came through loud and clear: employers want workers who have mastered not only the basic academic skills of reading, writing and arithmetic, but also much more. They want people who can learn on the job, master new skills, solve problems, work well with colleagues, and deal successfully with customers. This package of capabilities sounds like a course description for a quality vocational-technical program.

Specifically, the report, Workplace Basics: The Skills Employers Want, found that employers seek men and women with these attributes:

- Know how to learn.
- Can read, write and compute.
- Listen well and speak effectively.
- Can think creatively and solve problems.
- Take pride in their work, have good self-esteem, are able to set and meet goals, and manage their career well.
- Have good interpersonal skills, can negotiate with others, and are team players.
- Understands the importance of organizational effectiveness.

Every one of these skills is either taught as a matter of course or implied in classroom work or group projects in vocational-technical education.

All 1980 high school graduates

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A Quiz: Testing Your Knowledge of Vocational-Technical Education Today

The following self-test will give readers an idea of their knowledge of some of the current trends and directions in vocational-technical education. Directions: Match the number items on the left and right with the correct letter answer in the center.

1.	A vocational-technical education course that teaches how to apply principles of physics in completing tasks done on the job.	A.	80%
2.	A plan that articulates high school vocational-technical programs with a 2-year community college associate degree, and then a university bachelor's degree.	В.	Career Success
3.	A nonprofit organization that matches the needs of business and industry to education programs.	C.	Small Companies
4.	The percent of jobs that, even by the year 2000, will require education beyond high school but not a bachelor's degree.	D.	JTPA
5.	A magazine that is mailed to parents and students to inform them about career opportunities.	E.	Technology Exchange Center
6.	Courses developed by a consortium of States to help students learn the application of math and science principles in the real world.	F.	A lot more than you think

G. Alliance for manufacturing productivity H. Applied	7.	An agreement with businesses and community colleges to transfer manufacturing technology from universities, large businesses, and government research to smaller companies.
mathematics, applied biology, and	8.	Most of the new jobs in this country are created by what type of companies?
chemistry 1 - 2+2+2	9.	Vocational-technical education provides the majority of actual training for this program
J. 35% K. 29%	10.	How many U.S. companies need and support vocational-technical education?
Principles of technology 50%	11.	An industry that is facing a shortage of qualified workers.
N. Health Services O. Construction P. Electronics O. Fortune 500	12.	The percentage of the high school graduating class of 1985 that will complete a bachelor's degree.

Answers are on page 16.

Scoring:

If you answered 10 to 12 correctly, you are well on your way to understanding the important role of vocational-technical education today.

If you answered six to nine correctly, you have some homework to do.

If you scored below five, you need help! Call or write the National Council on Vocational Education, your State Council on Vocational Education, or the State Director of Vocational Education.

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The Carl D. Perkins Vocational Education Act and the National Council on Vocational Education

Vocational education has ranked high as a national priority for many years. Congress has long recognized the close relationship between vocational education and the strength of the Nation's economic base, and has used Federal leadership and financial resources to encourage and help the States to fulfill their primary responsibility to offer quality vocational education to all students across the country who need and seek such education.

In the Carl D. Perkins Vocational Education Act of 1984 (Public Law 98-524), named in memory of a distinguished Member of Congress who advocated expanded education programs, Congress created the National Council on Vocational Education and renewed a Federal commitment to assist States to expand and improve quality vocational educational programs. The Act is intended to ensure that individuals have access to quality vocational education, promote cooperation between public agencies and the private sector in preparing individuals for employment, and improve the academic foundations of vocational students. The Act is also aimed at retraining displaced workers in new skills, assisting the most economically depressed areas to raise their occupational competencies, improve the effectiveness of consumer and homemaking education, and strengthen research in vocational education.

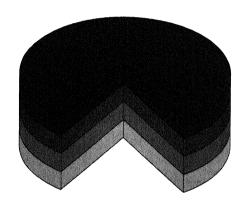
The Act requires that the Council consist of 17 members appointed by the President, of whom 9 shall represent the private sector. The current membership is drawn from widely diverse backgrounds in business, real estate, finance, government, education, communications, and public utilities and represents all regions of the country.

The Perkins Act mandates the Council to prepare this annual report, and to advise the President, Congress, and the Secretary of Education on:

- The effectiveness of the Vocational Education Act or its implementation in achieving its stated purpose, and in providing students with skills that meet needs of employers.
- Strategies for increasing cooperation between business and vocational education so that training is available for new technologies for which there is a demand.
- Implementation of the Perkins Act and of the Job Training Partnership Act, and on policies needed to expand and improve vocational-technical education programs (and apprenticeship programs) in order to build a coordinated capacity adequately to prepare America's workforce for employment.
- Practical approaches to retraining adult workers, and to enhancing education, business, and labor cooperation in retraining efforts.
- Effective ways of providing access to information regarding the market demand for skills that will enable State and local personnel to develop responsive vocational education curricula.
- Vocational education needs of the handicapped and the level of participation of the handicapped in vocational education programs.
- Types and levels of occupational competencies necessary for entry and sustained productive employment.

Previous Federal legislation authorized a National Advisory Council on Vocational Education. The Perkins Act changed the name, membership, and mandates of the Council, but retained the basic purpose -- to provide advice at the national level on vocational education.

Opportunities for Vocational-Technical Education Graduates.



- A wide variety of occupations
- Available jobs
- Good pay and benefits
- High skill requirements

Answers to the Self-Test

- 1. L
- 2. I
- 3. E
- **4 4**
- 5 B
- **6**. H
- 7. G
- 8. C
- 9. D
- **10**. F
- **11.** N or O or P
- 12 K